

MAMMOMAT Novation DR

SP

Installation Instructions

Component

Magnification table

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1

General information

4

Required tools and documentation.

5

2

Check and Adjustment

6

Detection of the Mag. table on the Mammomat Novation

7

Setting the end positions for the Carbon cover plate

8

Setting the end stop for the position for Mag. Factor 1.5.. . . .

9

Setting the end stop for the position for Mag. Factor 1.8.. . . .

11

This document describes the checks and adjustments that can be performed when the magnification table is used for the Mammomat Novation DR.

The magnification table is comprised of 2 components:

- Table with frame
- Cover plate (carbon cover)



Fig. 1: Magnification table

Required tools and documentation

- Standard tool
- Start-up Instructions SPB7-250.815.... for Mammomat Novation with WH AWS
- Start-up Instructions SPB7-250.812.... for Mammomat Novation with DROC
- QC manuals for Mammomat Novation DR

NOTE

Prior to setting or adjusting the magnification table, the collimator must be successfully adjusted. For detailed information, see:

- **Installation Instructions SPB7-250.812...**, chapter 10 (depending on the version) for systems with DROC
 - **System Start-up SPB7-250.815...**, chapter 7 (depending on the version) for systems with WH AWS
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Detection of the Mag. table on the Mammomat Novation

When the Mag. table is attached to the Mammomat Novation, a focus and collimation change takes place.

This can be checked as follows:

- Insert the guide rails of the Mag. Table into the openings provided for that purpose to the left and right of the detector.
- Move the Mag. Table back as far as possible (in the direction of the stand). This automatically selects the small focus (visible at the generator console).

NOTE

If the focus does not change automatically from large to small, switch S3 on the left back side of the grid assembly (1/Fig. 2 / p. 7) must be adjusted. Switch S3 must be operated with the Mag. Table pushed in. Also see:

- Start-up SPB7-250.812... , Detector Installation chapter, for systems with DROC
- Start-up SPB7-250.815.... , Detector Installation chapter, for systems with AWS

- Pull the Mag. table forward and remove it.

The large focus is selected again.

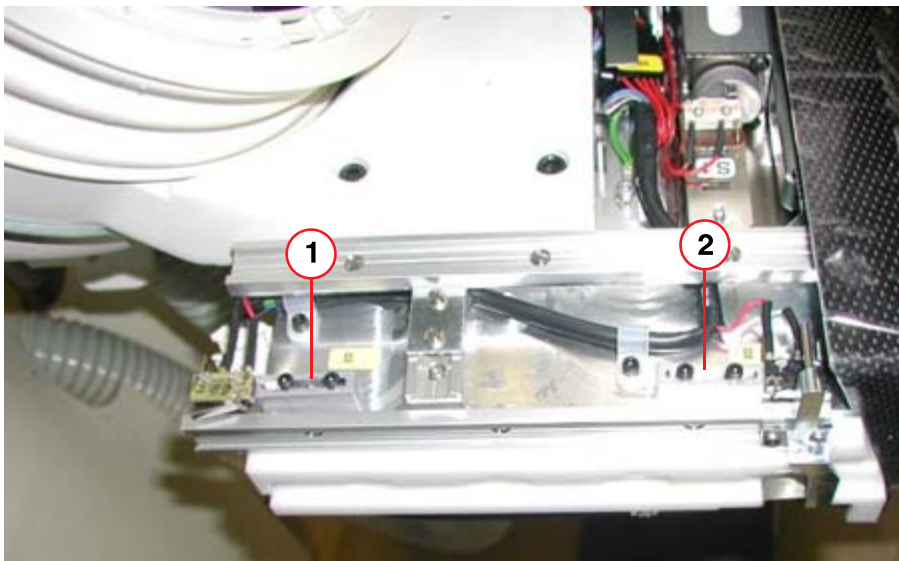


Fig. 2: Switch

If this is not the case, the position of switch S2 (2/Fig. 2 / p. 7) must be checked.

Setting the end positions for the Carbon cover plate

The magnification table offers two insertion options for the carbon cover plate.

The bottom guide rail is for magnification factor 1.5 and the top rail is for factor 1.8.

The setting procedure must be checked and adjusted for both positions.



Fig. 3: Cover right



Fig. 4: Cover left

- Remove the screws and covers ((Fig. 3 / p. 8) and (Fig. 4 / p. 8)).
- Attach the Mag. Table to the Mammomat Novation.
- Insert the Carbon cover plate all the way into the bottom rail.
- Ensure at the generator console that no collimation error is displayed. If a collimation error is displayed, the position of switch S1 (5/ Fig. 6 / p. 9) must be adjusted.

NOTE

The position of the cover plate is adjusted using exposures. Also see:

- QC manual, test 2 for systems with DROC
 - QC manual, test 10 for systems with WH AWS
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- Position the compression plate for the Mag. table. The simulator for the compression tube can also be used.

Setting the end stop for the position for Mag. Factor 1.5.

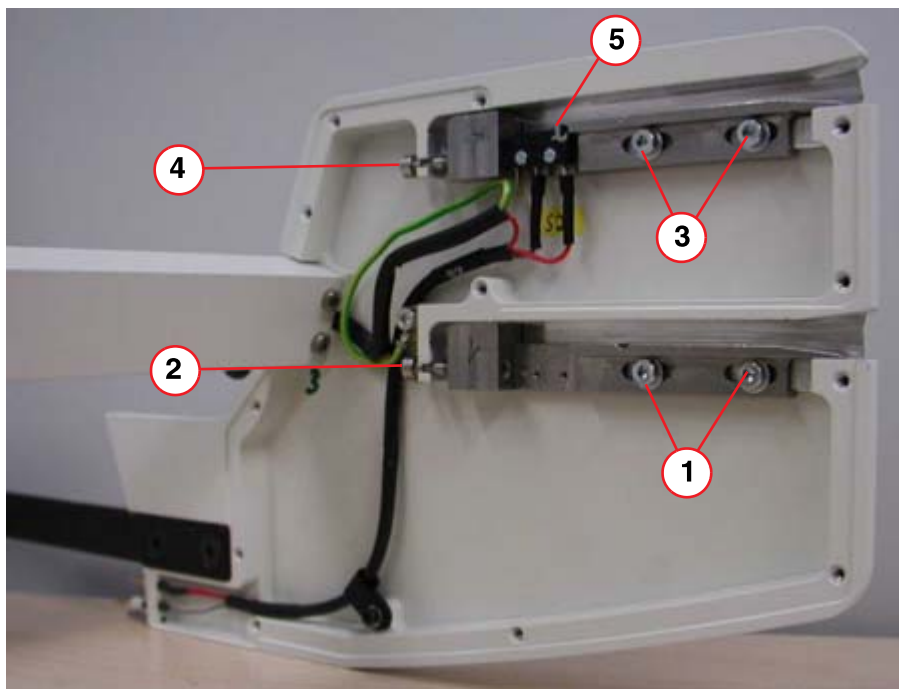


Fig. 5: Screws right

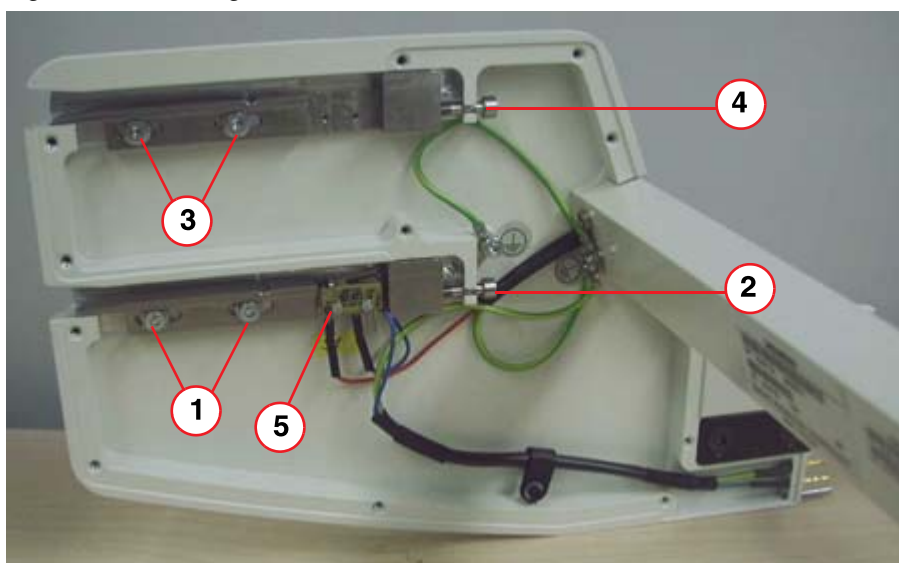


Fig. 6: Screws left

- Loosen 4x screws (1/Fig. 5 / p. 9) and (1/Fig. 6 / p. 9).
- Select 28 kV, AEC, and W/Rh at the generator console.
- Place the 40-mm plexi phantom on the cover plate.
- Trigger an exposure.
- Evaluate the exposure.
- Turn the adjusting screws (2/Fig. 5 / p. 9) and (2/Fig. 6 / p. 9) in a clockwise direction to move the cover plate back until the edge is no longer visible as a white line on the chest wall side of the exposure with W/Rh or until the cover plate abuts the Detector cover , One complete revolution of the screw shifts the plate approx. 0.5 mm.

NOTE

Both screws must be turned an equal amount so that the cover plate is not tilted.

NOTE

If the cover plate is resting against the detector cover, the adjusting slides may not be pushed back any further. Otherwise the lateral guides of the cover plate are not able to engage with the corresponding groove.

- Trigger and evaluate an exposure.
- Tighten the 4 screws (1/Fig. 5 / p. 9) und (1/Fig. 6 / p. 9).
- Switch to Mo/Mo at the generator console.
- Attach the coin to the cover plate of the Mag. table. See the QC manual, test 2 and test 10 (Test Chest wall missed tissue). The diameter of the coin is to be used to determine the overexposure.

NOTE

The magnification factor must be taken into consideration when measuring the coin diameter.

- Trigger and evaluate an exposure. Ensure that a max. overexposure of 5 mm is permissible.
- Trigger and evaluate an exposure with Mo/Mo and W/Rh. A white edge may not be visible on the chest wall side in the W/Rh exposure. The max. overexposure of 5 mm may not be exceeded in the Mo/Mo exposure.
- Log the values.

Setting the end stop for the position for Mag. Factor 1.8.

The cover plate position for factor 1.8 can be set in the same manner as for factor 1.5.

- The cover for factor 1.8 is detected via switch S2 (5/Fig. 5 / p. 9).
- Proceed in the same manner as for setting the position for factor 1.5. Loosen the screws ((3/Fig. 5 / p. 9) and (3/Fig. 6 / p. 9)) and use the adjusting screws ((4/Fig. 5 / p. 9) and (4/Fig. 6 / p. 9)) to adjust the position.

NOTE

Compliance with country-specific regulations (e.g., § 16 in Germany) must be ensured.

- Attach the covers ((Fig. 3 / p. 8) and (Fig. 4 / p. 8)).

